

Chapter 2

The Army's Model For Physical Readiness Training (PRT)

Military physical readiness training must seek to attain the development of every soldier's physical attributes to the fullest extent of their potential. This will imbue confidence in their ability to successfully perform their duties under any and all circumstances.

SECTION I – PHASES OF PRT

2-1. Commanders are faced with the continual challenge of how to physically train soldiers of varying capabilities. Training to the level of the least fit removes rigor from the program, while excessive rigor places less fit soldiers at risk of injury. Most commanders recognize this dilemma and attempt to occupy a reasonable middle ground. This chapter, together with Chapter 4, The Army PRT Program, guides commanders in the implementation of safe and challenging PRT programs. The Army PRT model utilizes phased training to create activities that are appropriate for soldiers of various physical capabilities. PRT is divided into two phases: toughening and conditioning.

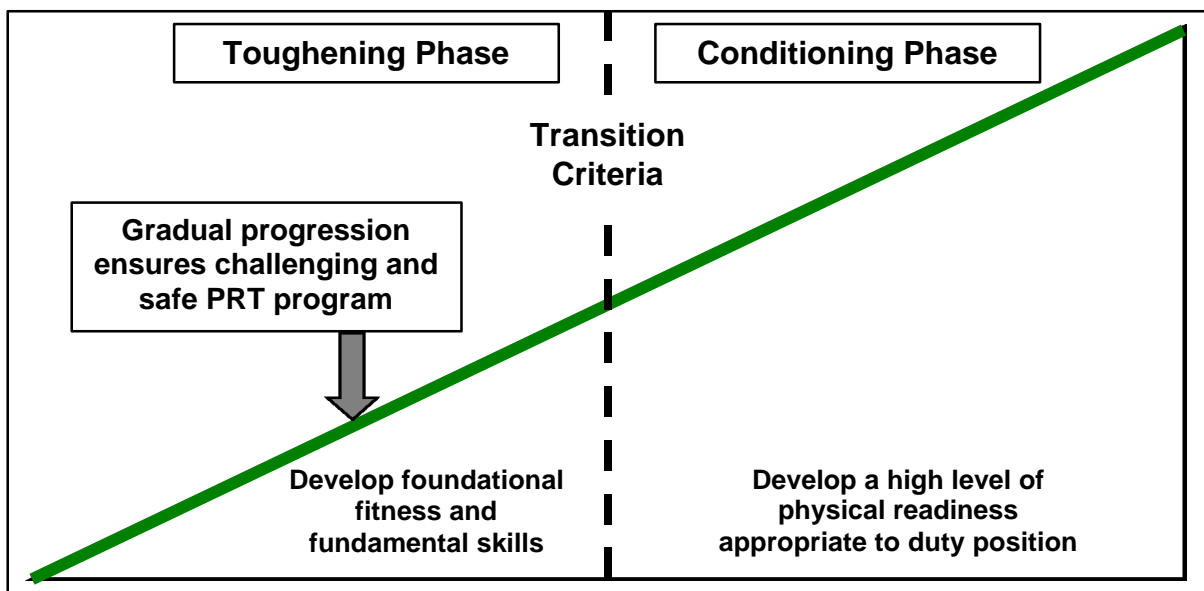


Figure 2-1 Phases of PRT

TOUGHENING PHASE

2-2. The purpose of the toughening phase is to develop foundational fitness and fundamental skills. A variety of training events with precise standards of execution ensures that bones, muscles, and connective tissues gradually “toughen” rather than break. In the toughening phase, soldiers gradually become proficient at managing their own body weight. Through training activities such as calisthenics, movement drills, grass drills and dumbbell drills, soldiers learn essential skills such as jumping, landing, lunging, bending, reaching and lifting. Their endurance improves through progression in these activities. The toughening phase prepares healthy soldiers to enter the conditioning phase, while enabling experienced soldiers who have been injured or inactive to recondition in order to re-enter the conditioning phase.

CONDITIONING PHASE

2-3. The purpose of the conditioning phase is to develop a high level of physical readiness appropriate to duty position. In this phase, activities become more demanding. More advanced calisthenic and dumbbell drills are added to increase the resistance of fundamental movements. Guerilla drills are included to develop functional jumping and lifting skills. Interval runs are added to further develop anaerobic endurance. Circuits that build strength and challenge individual movement techniques also add variety to this phase. Activities that directly support unit mission and METL are integrated into PRT sessions (i.e. individual movement techniques, obstacle course, combatives and orienteering). When you are physically mission-capable and all of your individual and unit physical readiness goals have been achieved, continued training emphasizes specialized skills and sustainment of physical readiness.

2-4. Factors such as extended field training, block leave, or recovery from illness or injury can cause soldiers to drop from a conditioning to a toughening phase. Units will have soldiers in both phases at the same time.

SECTION II – COMPONENTS OF PHYSICAL READINESS

2-5. Military physical readiness is the ability to meet the physical demands of any combat or duty situation, accomplish the mission and still have a reserve of strength. Physical readiness is essential to combat readiness. Figure 2-2 illustrates the three interactive components of physical readiness: strength, endurance and mobility.

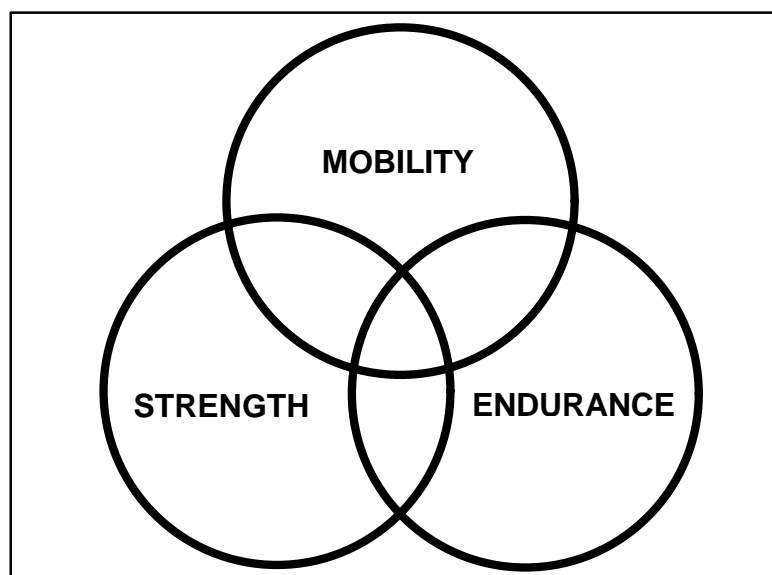


Figure. 2-2 Military Physical Readiness Components

STRENGTH

2-6. Strength is the ability to overcome resistance. Soldiers need strength to carry a combat load indefinitely, climb a rope or through a window, repeatedly load heavy rounds, lift equipment, perform vehicle maintenance and carry a wounded soldier off the battlefield. A well-designed strength training program improves performance, appearance and limits injuries. The Army's approach to strength training is primarily performance-oriented, with the goal of improving muscular development for functional movement against resistance. Calisthenics are the foundation of Army strength training and body management. They are designed to develop the fundamental movement skills necessary for soldier physical performance using the body for resistance. While calisthenics may be used as preparation for more intense training activities, when executed precisely to cadence for repeated sets, they place demands on your body that stimulate improvements in strength, endurance and mobility. The dumbbell, medicine ball, rifle, log and guerrilla drills explained later in this manual all add resistance to the calisthenic movements while challenging the soldier's ability to manipulate objects.

ENDURANCE

2-7. Endurance is the ability to sustain activity. Endurance training enhances both the ability to sustain high intensity activity of short duration (fast running, individual movement techniques and negotiating obstacles) and low intensity activity of long duration (marching, running, cross-country movement and water survival). A properly planned and executed endurance training program will be well balanced with respect to both aerobic (continuous, submaximal effort) and anaerobic (intermittent, high-intensity efforts) training. Analysis of the mission and METL for nearly all units will

show a significant need for anaerobic endurance. To enhance effectiveness and survivability, soldiers must train to efficiently perform activities of high intensity and short duration. Endurance programs based solely on distance running, while likely to improve aerobic endurance, will fail to prepare units for the type of anaerobic endurance they will need on the battlefield.

MOBILITY

2-8. Mobility is movement proficiency. Mobility is the functional application of strength and endurance. For example, strength with mobility allows a soldier to squat low, in order to achieve a good position to evacuate a casualty. Without sufficient mobility, a strong soldier will have difficulty executing the same casualty evacuation technique. Likewise, endurance without mobility may be fine for a distance runner, but for soldiers performing individual movement techniques (IMT), both components are essential for success. Performing movements with correct posture and precision improves physical readiness while limiting injuries. Qualitative performance factors for improved mobility include the following:

- Agility is the ability to stop, start, change direction and gracefully change body position. Performing grass drills, IMT, movement drills and negotiating obstacles all improve agility.
- Balance is the ability to maintain equilibrium. It is an essential component of nearly every move we make. Many forces, such as gravity and momentum are acting on your body at any given time. Sensing these forces and responding appropriately leads to quality movements. The drills in this manual are designed to challenge and improve balance.
- Coordination is the ability to perform multiple tasks. Driving military vehicles and operating various machinery and weaponry requires coordination. Coordination of arm, leg and trunk movements is essential in climbing and IMT.
- Flexibility is the range of movement at a joint and it's surrounding muscles. Flexibility is essential to perform quality movements safely. Regular, progressive and precise performance of calisthenics and resistance exercises will promote flexibility. Time spent on slow sustained stretching exercises at the completion of PRT sessions also helps to improve flexibility.
- Posture is any position in which the body resides. Posture is fluid and constantly changing as your body shifts to adapt to the force of gravity. Good posture is important to military bearing and optimal body function. Proper carriage of your body during standing, sitting, lifting, marching and running is essential to movement quality, performance and injury prevention.
- Stability is the ability to maintain or restore equilibrium when acted on by forces trying to displace it. Stability is dependent upon structural strength and is developed through drills like 4-for-the Core. Quality movements through full range of motion, such as lifting a heavy load from the ground to an overhead position, require stability to ensure peak performance without injury.

- Speed is rate of movement. Many soldier tasks require quick movement. Speed is improved through perfection of technique and conditioning. Running speed is improved by lengthening stride (improving technique) and increasing pace (improving condition).
- Power is a product of strength and speed. Throwing, jumping, striking and moving explosively from a starting position require both speed and strength training. Much of your power generates from your core (hips and torso). Developing strength, stability and mobility in this area are important to increasing power.

“Movement, as such, may replace by its effect any remedy, but all the remedies in the world cannot take the place of movement.”

Tissot, XVIII Century

SECTION III – PRINCIPLES OF PHYSICAL READINESS TRAINING

2-9. The principles of progression, variety and precision are imperative to the development of an effective PRT program. These principles apply to all soldiers at all levels of physical readiness.

PROGRESSION

2-10. Physical readiness improvement is dependent upon an increase in your physical work. The regularity/frequency (how often), overload/intensity (how hard) and/or duration/time (how long) of your exercise session must be gradually increased to safely and effectively improve your physical readiness. Recovery is an essential element for safe progression to occur. Your body must rest between sets and periods of exercise. Regular, adequate sleep and proper nutrition are needed to ensure that your body rests and refuels so it can strengthen and rebuild after strenuous physical activity. Specificity gears PRT toward battle-focused goals. The Army's PRT model of phased training illustrates progression from the toughening phase to the conditioning phase.

VARIETY

2-11. Performing different training activities balances your program, providing a more complete training effect. This challenges different areas of your body and addresses each physical readiness component appropriately. Variety also increases motivation and provides the recovery needed for safe progression. Specificity focuses on PRT goals. However, there are a variety of ways to achieve specific goals (using movement drills, 30/30s, intervals and ability group runs all to improve endurance). The following three modes of PRT categorize the variety of training activities on your PRT schedule. This manual will discuss the execution and implementation of various drills and exercises that fall within the following three modes of PRT:

- On-ground Training. This mode of training includes activities such as marching, running, calisthenics, IMT, grass drills and military

gymnastics. These activities will make up the largest portion of your training and are the basis of your PRT for strength, endurance and mobility.

- Off-ground Training. This mode of training develops many of the elements that contribute to good mobility. Activities include: climbing drills, negotiating obstacles, military gymnastics, guerrilla drills, jumping and landing. Awareness of your body's position while moving through space is an attribute of off-ground training.
- Combatives. This mode of training encompasses elements of both on and off-ground training, instilling a warrior spirit while developing your ability to control external aggression. Many of the exercises in this manual will prepare you physically to learn and perform combative skills. Refer to FM 21-150 Combatives for guidance on combatives training.

PRECISION

2-12. Perform all exercises with emphasis on correct posture and execution to ensure optimal physical readiness improvement and control injuries. The quality of the movements you perform during PRT is key to determining the level of physical readiness you will attain.

SECTION IV – ELEMENTS OF A PRT SESSION

2-13. PRT programs will include the following elements: Preparation, Activity and Recovery. Each of these elements will include the activities necessary to conduct battle-focused PRT sessions that effectively address physical readiness components.

PREPARATION

2-14. Exercises performed during the preparation portion of your workout will appropriately prepare your body for intense PRT activities. Five repetitions of Calisthenic Drill 1 and two repetitions of Movement Drill 1 will be performed. Preparation may last anywhere from 10 to 15 minutes, depending on the type of activities scheduled.

ACTIVITY

2-15. Activities performed during this portion of the workout address specific PRT goals in the areas of strength, endurance and mobility and will make up a majority of the training time (30 to 50 minutes). Refer to the sample schedules in Chapter 5.

RECOVERY

2-16. Activities such as walking, flexibility improvement and core stability exercises performed toward the end of your workout are designed to gradually and safely taper off your conditioning activities and bring your body back to its pre-exercise state. The element of recovery carries over until

the next exercise session is performed. Restoring adequate hydration and energy balance through proper nutrition as well as receiving adequate sleep allows the body to refuel and rest. This results in a positive adaptation to the stress of training by lowering the risk of injury and optimizing gains in strength, endurance and mobility.

SECTION V – SUMMARY

2-17. All PRT, whether performed individually or as a group, must improve the physical ability of the entire unit to successfully perform all mission tasks. Any PRT that results in numerous injuries is detrimental to this goal. This manual provides guidance for conducting safe and sound PRT that challenges soldiers without undue risk of injury.